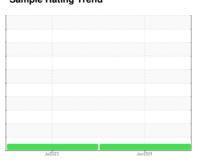


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id
338656

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Cample Number Client Info PCA0129126 PCA0102924	iAL)			Jul2023	Jun 2 024		
Client Info	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 66714 129336	Sample Number		Client Info		PCA0129126	PCA0102924	
Oil Age	Sample Date		Client Info		28 Jun 2024	25 Jul 2023	
Oil Changed Client Info Not Changd NORMAL NORMA	Machine Age	mls	Client Info		66714	129336	
CONTAMINATION	Oil Age	mls	Client Info		66714	0	
CONTAMINATION	Oil Changed		Client Info		Not Changd	Not Changd	
Fuel	Sample Status				NORMAL	NORMAL	
Water WC Method >0.2 NEG NEG	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	
Chromium	Glycol		WC Method		NEG	NEG	
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	ron	ppm		>100			
Silver	Chromium	ppm	ASTM D5185m	>20	1	1	
Silver	Nickel	ppm	ASTM D5185m	>4	<1	<1	
Aluminum	Titanium	ppm	ASTM D5185m		3	0	
Lead	Silver	ppm	ASTM D5185m	>3	0	0	
Copper	Aluminum	ppm	ASTM D5185m	>20	15	11	
Tin	Lead	ppm	ASTM D5185m	>40	0	0	
Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 10 49 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 0 4 11 Manganese ppm ASTM D5185m 0 4 11 Magnesium ppm ASTM D5185m 950 817 515 Calcium ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 h	Copper	ppm	ASTM D5185m	>330	14	30	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 10 49 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 50 53 44 Manganese ppm ASTM D5185m 0 4 11 Magnesium ppm ASTM D5185m 950 817 515 Calcium ppm ASTM D5185m 950 1390 1700 Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 7 <td>Tin</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>15</td> <td>3</td> <td>3</td> <td></td>	Tin	ppm	ASTM D5185m	>15	3	3	
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	
Boron	Cadmium	ppm	ASTM D5185m		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 53 44 Manganese ppm ASTM D5185m 0 4 11 Magnesium ppm ASTM D5185m 950 817 515 Calcium ppm ASTM D5185m 1050 1390 1700 Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m 4 4 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current<	Boron	ppm	ASTM D5185m	2	10	49	
Manganese ppm ASTM D5185m 0 4 11 Magnesium ppm ASTM D5185m 950 817 515 Calcium ppm ASTM D5185m 1050 1390 1700 Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m >20 31 17 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624	Barium	ppm	ASTM D5185m	0	0	2	
Magnesium ppm ASTM D5185m 950 817 515 Calcium ppm ASTM D5185m 1050 1390 1700 Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Sulfation Abs/.1mm *ASTM D7624 >20 9.8 7.8 FLUID DEGRADATION method li	Molybdenum	ppm	ASTM D5185m	50	53	44	
Calcium ppm ASTM D5185m 1050 1390 1700 Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m >20 31 17 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION *ASTM D7414 <td< td=""><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><td>4</td><td>11</td><td></td></td<>	Manganese	ppm	ASTM D5185m	0	4	11	
Phosphorus ppm ASTM D5185m 995 1016 752 Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m 4 4 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION *ASTM D7414 >25 <td>Magnesium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>950</td> <td>817</td> <td>515</td> <td></td>	Magnesium	ppm	ASTM D5185m	950	817	515	
Zinc ppm ASTM D5185m 1180 1261 922 Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m 4 4 4 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Calcium	ppm	ASTM D5185m	1050	1390	1700	
Sulfur ppm ASTM D5185m 2600 3533 2586 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m 4 4 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Sulfation Abs/.1mm *ASTM D7624 >20 9.8 7.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Phosphorus	ppm	ASTM D5185m	995	1016	752	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 11 Sodium ppm ASTM D5185m 4 4 Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Zinc	ppm	ASTM D5185m	1180	1261	922	
Solition ppm ASTM D5185m >25 7 11	Sulfur	ppm	ASTM D5185m	2600	3533	2586	
Sodium	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 31 17 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Silicon	ppm	ASTM D5185m	>25	7	11	
INFRA-RED	Sodium	ppm	ASTM D5185m		4	4	
Soot % % *ASTM D7844 >3 0.6 0.3 Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Potassium	ppm	ASTM D5185m	>20	31	17	
Nitration Abs/cm *ASTM D7624 >20 9.8 7.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.8 22.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Soot %	%	*ASTM D7844	>3	0.6	0.3	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.9 20.9	Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.8	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	22.9	
	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 7.9 10.4	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	20.9	
	Base Number (BN)	mg KOH/g	ASTM D2896		7.9	10.4	



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Lab Number : 06234452 Unique Number : 11123286

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0129126

Received **Tested** Diagnosed

: 12 Jul 2024 : 12 Jul 2024 : 12 Jul 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

MILLER TRUCK LEASING #118

2196 BENNETT ROAD PHILADELPHIA, PA US 19116

Contact: ROSTY VITER rviter@millertransgroup.com T: (215)552-9832

F: (215)552-9892 Contact/Location: ROSTY VITER - MILPHINE